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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/607,895

Applicant(s)

KREINER ET AL.

Examiner

Tuan A. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 20-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the Applicant's response filed 6/10/07.

As indicated in Applicant's response, claims 1, 3-8, 10, 20-21, 26 have been amended, and claims 11, 13-19 canceled. Claims 1-10, 12, 20-27 are pending in the office action.

Claims Objections

2. The language recited as 'hardware input instructions' and 'hardware output instructions' as recited in claims 1, 20, 26 along with the dependent claims is **objected to** because this represents a misrepresented concept for it is nowhere defined or described in the Specifications. Broadly interpreted, a hardware input instruction entails an instruction that when executed enables data to be inputted into a piece of hardware. A hardware output instruction entails that if executed such instruction would enable data from a piece of hardware to be outputted. The concept behind this hardware-related instruction is not defined anywhere in the Disclosure to correlate an output or an input in accordance to the above interpretation of the objected to language or phraseology. This improper language to represent a concept in that it is not described properly in the Specifications would lead to a non-enablement impropriety which requires removal of the language in order for the Application not to incur, *inter alia*, a potential non-statutory subject matter rejection. The above language for being no commensurate with the Specifications, will be treated as mere input into a keyboard or a microphone such to formulate a request for a service to be rendered in terms of data input from the requester being returned as output from the provider, the term 'hardware' having no real patentable weight. Correction to the above impropriety is required.

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3. Claim 26 recites 'executing the hardware output instructions *relating to relating to* the hardware outputs ...' (last line) containing what appears to be a typographical impropriety; and is objected to pending correction.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-10, 12, 20, and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites '... hardware input instructions being compatible with the second operating system ... second computer ... and incompatible with the proprietary operating system ... first computer' (lines 3-4; lines 21-22); and there appears to be no disclosed text describing this limitation. The Specifications mentions about incompatible operating systems of various machines requiring the use of a language neutral format as a mediator. The Disclosure relates to a general scheme of client server communication wherein client initiates a request and by using neutral XML format, which is conveying the client directives (input initiated via keyboard from the client machine), transmits this XML form (to a server machine) which is parsed and converted at the receiving server machine, the conversion of said client's input from this XML form leading to a conversion at the server side OS of native application being executed therein

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such that whose output would be reconverted in XML form to be received and converted for use or view at the requesting client machine. There is no requirement nor is there any implementation details thereof showing that some hardware input instructions when received at the server will be incompatible with the client OS, necessarily in a explicit mention about some incompatibility (with respect to an OS) constraints in direct relation to any **hardware input** (emphasis added) anywhere in the Disclosure. The above limitation will be treated as having no weight and its merits would amount to a mere interpretation that the hardware input instructions are the client directives from a keyboard and that these instructions are compatibly executable to the server side only after conversion into a native form within the server system is effected. The above unsupported subject matter if not removed will lead to lack of enablement, which can lead to non-statutory subject matter.

Claim 20 recites 'hardware output instructions ... compatible ... second operating system . Incompatible ... operating system on the first computer...' (lines 7-8); and likewise amounts to a lack of description deficiency type of language because there is no mention of hardware output instructions in a direct relation to any incompatibility constraints all throughout the Disclosure.

Claim 26 recites '... hardware input instructions ... compatible first operating system ... incompatible with the second operating system...' (line 10, line 21); and is rejected likewise.

Claims 2-10, 12 for failing to remedy to the above lack of description, will be also rejected.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-10, 12, 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by

Salmenkaita et al., USPN: 2004/0176958 (hereinafter Salmenkaita).

As per claim 1, Salmenkaita discloses a method for providing remote computer access on a second computer from a first computer over a network, comprising:

via a first user interface, receiving a first hardware input instruction by a proprietary operating system on the first computer for execution, the first hardware input instruction being operationally compatible with the proprietary operating system (e.g. *voice command* – Fig. 2A, 2D; receive voice command 282 – Fig. 4I; Fig 5A; user input 710-Fig 7A, input 730 – Fig. 7B; Fig. 4C-4D) and operationally incompatible with a second operating system executing on the second computer which incorporates a second user interface, wherein the first user interface is dissimilar to the second user interface (Note: server OS and client OS having dissimilar UI is implicit in Salmenkaita's paradigm and native code running on both UI are mutually not compatible, in light of the use of XML mediating neutral carrier);

translating the first hardware input instruction into a non-proprietary data script defining at least one XML item utilizing a first device driver resident in the proprietary operating system on the first computer, wherein the first device driver formats the first hardware input instruction into at least one XML element item corresponding to the first hardware input instruction (e.g. *voice XML tags* -para 0052; *embed voice tags in a XML message* -- para 0056-0061, pg. 4-5; para 0172-0174, pg. 14), wherein the device driver formats the first instruction into at least one

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XML element corresponding to the first instruction (e.g. para 0172-0174; inference engine – para 0232);

transmitting the non-proprietary data script defining the at least one XML item from the first computer to the second computer (e.g. para 0085-0086, pg. 8; *Message 515, XML file 227 - Fig. 4C, D*);

translating the non-proprietary data script defining the at least one XML item into a second hardware input instruction utilizing a second device driver in the second operating system on the second computer, wherein the second device driver translates the at least one XML item corresponding to the first hardware input instruction into the second hardware input instruction (step 736 – Fig. 7B; para 0258, pg. 21),

the second hardware input instruction being compatible with the second operating system on the second computer and incompatible with the proprietary operating system on the first computer (e.g. xml 227 - Fig. 4c, 4d; services 440, 442, 444, 446, 448, 450 method calls – Fig. 6; *invoke ...method ... metadata vector* – para 0258, pg. 21--Note: server with proprietary services to effect recommendations fulfilling applications whose results are sent back to client wireless reads on not compatible with native environment of wireless client – see Fig. 5A), said second hardware input instruction being functionally similar corresponding to the first hardware input instruction (e.g. boxes 216, 240, 242, 244, 246 – Fig. 4D; para 0249, pg. 21; steps 364-366 Fig. 5A) for execution on the second computer; and

executing said second hardware input instruction on said second computer (e.g. Fig 4D; para 0177, pg. 15; Fig. 4E; para 0225-0227, pg. 18; Fig. 5; *receive ... service 368* – Fig. 5A).

As per claims 2-3, Salmenkaita discloses said first HW input instruction reception comprising receiving an instruction for outputting data or displaying data (e.g. display area 102B --Fig. 1; *recommended services* – Fig 2B-C; Figs. 3; *prepared updated MENU 224* – to device 100; *MENU message 509* – Fig. 4B, 4D – Note: selection by wireless user for a recommendation being serviced and updated by server for retransmission back to wireless client as updated recommendation MENU reads on instruction of data outputting)..

As per claim 4, Salmenkaita discloses receiving an instruction for outputting data which further comprises receiving an instruction for generating a sound (e.g. *audio metadata 125'* – Fig. 4B; *audio output* - para 0085, pg. 8).

As per claims 5 and 7, Salmenkaita discloses receiving said first HW input instruction which comprises receiving an instruction for inputting data; an instruction indicating a computer keyboard input (Fig. 1).

As per claim 6, Salmenkaita discloses HW input receiving via a touch pad, the use of touchpad in some small device to provide mouse functionality was equivalent to a mouse click (touch pad as in *Touch sensor* - para 0072, pg. 6; Fig. 1).

As per claim 8, Salmenkaita discloses wherein translating the first hardware input instruction into a data script defining at least one XML item comprises generating a first XML tag defining the beginning of the XML item, generating a data item corresponding to the first hardware input instruction, and generating a second XML tag defining the end of the XML item (e.g. Table D, E, pg. 14; para 0155, pg. 11; *processing instruction* – para 0163-0164, pg. 12)..

As per claim 9, Salmenkaita discloses transmitting the data using HTTP (e.g. Fig. 6, para 0179, pg. 15; para 0266-0271, pg. 22; Fig. 3D).

As per claim 10, Salmenkaita discloses wherein translating the data into a second instruction comprises identifying a first XML tag defining the beginning of an XML item, identifying a data item corresponding to a hardware input instruction, identifying a second XML tag defining the end of an XML item (para 0232, pg. 19; *specification ... activity* – para 0156, pg. 11; para 0163-0164, pg. 12).

As per claim 12, Salmenkaita discloses a computer readable medium (refer to claim 1 for corresponding rejection) having computer-implementable instructions stored thereon for performing the method recited in claim 1.

As per claim 20, Salmenkaita discloses a system for remote computer access, comprising:

a first computing system having stored thereon software which when executed on the first computing system is operable(e.g. Fig. 4C) for identifying hardware input instructions compatible with a proprietary operating system on the first computer system, the hardware input instructions relating to generating system outputs (e.g. Fig. 4D; Fig. 7C) in response to a user input,

translating the hardware input instructions into non-proprietary data script defining an outgoing XML item corresponding to the hardware input instructions by utilizing a first device driver within the proprietary operating system on the first computer system, wherein the first device driver formats the hardware input instructions into an outgoing XML item corresponding to the hardware input instructions (e.g. *voice XML tags* -para 0052; *embed voice tags in a XML message* -- para 0056-0061, pg. 4-5; para 0172-0174),

transmitting the non-proprietary data script defining the outgoing XML item corresponding to the hardware input instructions relating to generating system outputs(e.g. Fig. 4C), and

receiving an incoming XML item (Fig. 4D) corresponding to the user input for execution on the first computing system (e.g. para 0085-0086, pg. 8; *Message 515, XML file 227* - Fig. 4C, D – Note: transmitting by wireless device or first system -- Fig. 4C, 4E -- **reads on** receiving by the server or second system -- Fig. 4D, 4F);

a second computing system having stored thereon software which when executed on the second computing system is operable (e.g. Fig. 4D, 4F) for identifying hardware output instructions operationally compatible with a second operating system on the second computer system and operationally incompatible with the proprietary operating system on the first computer system (Note: server with proprietary services to effect recommendations fulfilling applications or to retrieve output data to send back to client wireless reads on not compatible with native environment of wireless client – see Fig. 5A), the hardware output instructions relating to the user input (para 0056-0061, pg. 4-5),

translating the hardware output instructions into non-proprietary data script defining an incoming XML item utilizing a second device driver in the second operating system on the second computer system, wherein the second device driver formats the hardware output instructions into an incoming XML item corresponding to the hardware output instructions (e.g. *recommendations, XML messages* - pg. 13, para 0168-1070; steps 231, 244, 246, 248 –Fig. 4D – Note: refer to Claims USC 112, 2nd paragraph Rejection for limitation interpretation),

transmitting the non-proprietary data script defining the incoming XML item corresponding to the hardware output instructions relating to the user input, and sending the incoming XML item corresponding to generating outputs user input from the second computer system for execution on the first computer system (e.g. steps 231, 244, 246, 248 –Fig. 4D – Note: transmitting the Script and sending the XML coming from the client back to the client's first computer reads on a same XML script including outputs generated by the second computer); and

a communications network operably coupled between said first computing system and said second computing system for transmitting the non-proprietary data script defining incoming and outgoing XML items between said first computing system and said second computing system (Figs. 1-2).

As per claim 21, Salmenkaita discloses a method for providing remote computer access, comprising:

receiving instructions relating to generating output (e.g. *voice command* – Fig. 2A, 2D; receive voice command 282 – Fig. 4I; Fig 5A; user input 710-Fig 7A, input 730 – Fig. 7B; Fig. 4C-4D) on a first computer from a first operating system on the first computer, the instructions being compatible with the first operating system and incompatible with a second operating system on a second computer;

creating data defining at least one XML item corresponding to the instructions relating to generating output, wherein the instructions are created into at least one XML element corresponding to the instructions (*voice XML tags* -para 0052; *embed voice tags in a XML message* -- para 0056-0061, pg. 4-5; para 0172-0174, pg. 14);

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transmitting the data defining at least one XML item from the first computer to the second computer (e.g. Fig. 4C);

receiving data defining an XML item relating to inputs on the first computer from the second computer (e.g. steps 231, 244, 246, 248 – Fig. 4D);

creating instructions relating to inputs from the data defining an XML item relating to inputs, the instructions relating to inputs (step 736 – Fig. 7B; para 0258, pg. 21; Fig. 4c, 4d; services 440, 442, 444, 446, 448, 450 method calls – Fig. 6; *invoke ...method ... metadata vector* – para 0258, pg. 21) being compatible with the first operating system on the first computer and incompatible with the second operating system on the second computer (Note: server with proprietary services to effect recommendations fulfilling applications to send back to client wireless reads on not compatible with native environment of wireless client – see Fig. 5A); and
executing the instructions relating to inputs on the second computer (re claim 1).

As per claims 22-25, these claims correspond to claims 14-17, respectively; therefore will incorporate the corresponding rejection as set forth therein.

As per claim 26, Salmenkaita discloses a method for providing remote computer access, comprising:

transmitting a remote access request from a first computer to a second computer;
receiving a hardware_input instruction relating to a user input by a first operating system on the first computer (*voice command* – Fig. 2A, 2D; receive voice command 282 – Fig. 4I; Fig 5A; user input 710-Fig 7A, input 730 – Fig. 7B; Fig. 4C-4D), the hardware input instruction being compatible with the first operating system and incompatible with a proprietary second operating system on the second computer;

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creating data defining at least one XML item corresponding to the hardware input instruction relating to the user input;

transmitting the data defining at least one XML item corresponding to the hardware input instruction from the first computer to the second computer (para 0085-0086, pg. 8; *Message 515*, *XML file 227* - Fig. 4C, D);

translating the at least one XML item corresponding to the hardware input from XML format to a second hardware input instruction compatible with the proprietary second operating system; executing the second hardware input instruction (e.g. xml 227 - Fig. 4c, 4d; services 440, 442, 444, 446, 448, 450 method calls – Fig. 6; *invoke ...method ... metadata vector* – para 0258, pg. 21);

receiving data from the second operating system related to the second hardware input instruction defining an XML item providing hardware outputs for the first computer (e.g. boxes 216, 240, 242, 244, 246 – Fig. 4D; para 0249, pg. 21; steps 364-366 Fig. 5A);

creating hardware output instructions relating to the hardware outputs for the first computer, and executing the hardware output instructions relating to the hardware outputs for the first computer (e.g. Fig 4D; para 0177, pg. 15; Fig. 4E; para 0225-0227, pg. 18; Fig. 5; *receive ... service 368* – Fig. 5A --Note: the limitation as to ‘the hardware output instructions relating to the hardware input being compatible with the first operating system on the first computer and incompatible with the second operating system on the second computer’ having been addressed in claim 1, i.e. without justifiable merits in view of the § 112 Rejection).

As per claim 27, see Salmenkaita (e.g. Browser 102, Fig. 3B; Fig. 6, para 0179, pg. 15; para 0266-0271, pg. 22; Fig. 3D).

Response to Arguments

8. Applicant's arguments filed 6/10/07 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

35 USC § 102 Rejection:

(A) Applicants have submitted that Salmenkaita fails to disclose two computer systems ... incompatible instructions with respect to each other; and Salmenkaita's translated voice commands are incompatible with the wireless device OS; and that Salmenkaita's OS is not directly compatible with raw voice commands requiring conversion of utterances into some format being compatible with the wireless OS (Appl. Rmrks pg. 10, second half).

First, the Specifications does not provide explicit and deliberate teaching in regard to what constitutes *incompatible instructions* such that a incompatibility requirement can be construed relative to some executing apparatus, application layer, operating system or parts thereof. There are no sufficient details to support incompatibility being mutual among platform and further, specifically respective to any particular type of instructions (e.g. instructions before they are received at the client machine keyboard, after they are received as input, after they are retranslated to a script, just as they are received raw at the server end, after they are retranslated in executable form, and so on). The claim appears to contain a limitation that does not come with the original Disclosure.

Second, the term 'incompatible' is not mentioned once (emphasis added) any where in the Specifications so to be in tight time relation (emphasis added -- on sequence context) to each and every step of the disclosed process flow starting from client's end keyboard input receiving, through actions by the server end and back to end user executing the converted form based on

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the XML content returned by the server. There is mention as para 0044, pg. 16 about different OS incompatibility affording the usefulness of a intermediary format; but this is not teaching how mutually compatible amounts to and **what** exactly is mutually incompatible at a very particular stage in the course of data transformation and transmission; and that, with respect to each operating portion of a sending machine or a receiving machine. Thus that vague mentioning (para 0044) about OS being incompatible cannot support the specific limitation of the claim; and this has been identified in the § 112 Rejection. As set forth in the USC § 112 rejection, the incompatible limitation would bear a meaning afforded only via broad interpretation (which is to referred to 35 USC § 112, 1st paragraph Rejection).

It is deemed that Salmenkaita's teachings fulfill the claim; that is, using a XML intermediary form to convey instructions from the client end to the server end and allowing the server to extract this XML format into proper executable native code in the server, thereby provide an output to be transmitted back to the client using that neutral XML form carrier. It is well known that the use of a mediating language like XML is to obviate incompatibility issues mutually existing between native systems. Besides, Applicants' mention that

(i) Salmenkaita's wireless device and network server are incompatible;

(ii) utterances are incompatible with the very wireless OS

seem largely misplaced and otherwise unrelated to the claimed subject matter, i.e. in light of what exactly is recited in the claim. The arguments appear to be based on a teaching that is not disclosed when the limitation (refer to USC 112) in question is not supported by the Specifications; therefore the arguments will not be sufficient to overcome the rejection. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general

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allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

(B) Applicants have submitted that Salmenkaita fails to disclose translation of voice short-cuts into instructions incompatible with respect to the wireless (Appl. Rmrks pg 11, top). The limitation using 'hardware input instruction' or 'hardware output instructions' is given very limited weight in light of the Claim Objections. They have been interpreted as keyboard input from the client end used to convey a request for some output data from the server; and when these output data are sent back, these are actually hardware output instructions originated from the client request using the keyboard interface. And as to whether these instructions are incompatible with the wireless device once they are reconverted in the server executable form, the teaching of Salmenkaita makes it clear that voice commands **are not** server code being executed as server native code in order for output to be retransmitted back as XML format to user, the reconversion of which at the client/user end would support the user to make use of the output being sent back. The argument that Salmenkaita's wireless voice instructions after being converted into the server instructions are not incompatible with respect to the wireless device appear to set foundation on the far-fetched limitation being identified in the 35 USC § 112 rejection in regard to incompatible instructions among mutual proprietary OS. That limitation is deemed as having no patentable weight and this impropriety has been addressed as lack of description therein, rendering the argument insufficient to overcome Salmenkaita as this has been addressed in section A above.

In all, the claims will stand rejected as set forth in the Office Action.

Conclusion

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan A Vu
Patent Examiner,
Art Unit 2193
July 23, 2007